

Review Comments
Draft Stormwater Source Control Evaluation Report
Lampros Properties
9040 N Burgard Way
Portland, Oregon
ECSI# 2441
Dated September 8, 2015

Submitted November 2, 2015

Following are the United States Environmental Protection Agency's (EPA) comments on the September 2015 document entitled, Draft Source Control Evaluation Report, Lampros Properties, 9040 N Burgard Way, Portland, Oregon prepared by SLR International Corporation, Inc. (SLR). The site is listed as ECSI #2437, within the Burgard Industrial Park, located within the T-4/International Slip geographic region at approximate river mile RM3.8E. The facility discharges stormwater to Outfall 18/WR-123 at the sediment management area of T4.

EPA understands the objective of the assessment activities were to improve the understanding of stormwater flow patterns and to screen site soils, catch basin sediments, and stormwater discharges to ensure the site is not potentially contributing hazardous substances to the Willamette River via municipal or private stormwater utilities. The stormwater assessment was performed pursuant to the request of the Oregon Department of Environmental Quality (DEQ) in the Letter of Agreement for Stormwater Assessment and Source Control, Lampros Properties, dated March 10, 2011, and the additional letter with DEQ's specific requests to Lampros Properties, dated August 6, 2015.

General Comments

1. The table below summarizes the information presented in the Assessment Report and EPA's recommendations for the Lampros Properties site. Based on current information, EPA recommends that DEQ consider accepting the proposed stormwater source control measures (SCMs) described in Section 4 of the Assessment Report. The effectiveness of these SCMs will need to be evaluated through subsequent stormwater sampling as described in the Stormwater Sampling Work Plan (Appendix A), and EPA requests the opportunity to review and comment on the analytical results. Lampros should consider modifications to the Stormwater Sampling Work Plan per Specific Comment #8 below.
2. Future stormwater sampling efforts should strive to comply with JSCS sampling guidance and storm event criteria to collect data that is sufficiently representative of stormwater discharges from the site to the Willamette River. The stormwater results presented in the Assessment Report do not fully meet JSCS criteria, and their usability for assessing the effectiveness of SCMs therefore may be limited. In addition, future stormwater sampling locations should be representative of discharges from the site to the Willamette River. Additional sampling locations may be necessary to identify contaminant sources.

EPA Site Status Summary – Lampros Properties

Question	Answer	Description
Are source control measures being implemented?	Yes	Routine catch basin inspection and maintenance; routine vacuum sweeping of paved drive areas and hand sweeping when necessary; as-needed pressure-washing of worn asphalt (typically annually); asphalt pavement re-surfacing in areas with heavy damage; installation, inspection, and maintenance of catch basin filtration inserts; soil erosion protection of a retaining wall with filtration rocks between the bank of the hillside and CB-East; sediment cleaned from trunk line; extensive power washing removed 40 yards of legacy dirt and gravel (taken offsite).
Are there JSCS SLV exceedances?	Yes*	Soil: metals, PCB Aroclors, Phthalate Esters, and PAHs. Magnitudes of exceedances are not presented. Stormwater: metals, PCB Aroclors (only in samples from 2013 and earlier), Phthalate Ester (Bis (2-ethylhexyl) phthalate only), PAHs. Magnitudes of exceedances are not presented.
Are there stormwater PRG exceedances?	Yes*	RAO 3: Arsenic, PAHs. RAO 7: Copper, zinc, PAHs. RAO 1 (sediment): Arsenic RAO 5 (sediment): Copper, Lead, Zinc
Are pollutant concentrations typical of Portland Harbor industrial sites (e.g. below the knee of the curve)?	No	Soil: PCBs above knee Stormwater: Only older samples above knee including: Arsenic Cadmium, Chromium, Nickel, PAHs, and TSS.
Are stormwater COCs from this site the same as those defined for the associated SDU/SMA?	Yes	TPH, metals, PAHs, dioxins, and PCBs.
Do sampled stormwater events meet JSCS criteria?	No	Refer to Specific Comment #4a below.
Is further stormwater data collection recommended?	Yes	Collect additional stormwater samples according to the final Stormwater Sampling Work Plan. Refer to Specific Comment #8 below.
Are additional source control measures recommended?	Yes	Implement the additional SCMs described in Section 4 of the Assessment Report.

*Sampling areas were not necessarily representative of discharges to the Willamette River.

Specific Comments

1. Cover Letter:

- a. DEQ Request (a) Sediment disposal manifests do not appear to be attached to the Assessment Report.
- b. DEQ Request (c) “Section of the SCE Report” has a typo, it should say “Appendix C” for hydrographs.
- c. DEQ Request (f) “Section of the SCE Report” has a typo, it should say “Appendix E” for rank order curves.

2. Section 2.2 Stormwater Conveyance System: Figure 3 shows the stormwater conveyance system but not the pipe diameter, connections, and invert elevations as recommended by the JSCS Appendix D Framework for Portland Harbor Storm Water Screening Evaluations (JSCS Appendix D, Section D.2.2). This information should be provided. In addition, an arrow is needed in the northwest corner of Figure 3 to indicate the approximate surface flow direction in this area.

3. Section 4 Ongoing Stormwater Management Measures: Clarify when the nine additional catch basin filtration inserts will be installed in the text and add this information to the Appendix A Work Plan. There are two types of filtration inserts present: one type is designed to remove suspended solids, oil and hydrocarbons, and dissolved metals, the other filtration insert is designed to remove suspended solids and oil and hydrocarbons. Indicate in the text and on Figure 4 what type is installed in CB-3, CB-9, CB-11, CB-S2, and CB-Z. Also, clarify what type of filtration insert will be installed in the nine additional catch basins. Only seven additional filtration inserts are shown on Figure 4. Provide an explanation as to why the western, eastern, and southern perimeters of the property are not routinely vacuum swept.

4. Section 5.1.1 Stormwater Sampling:

- a. The JSCS guidance (Section D.5.2) states that at least four separate storm events per year be sampled. Two of the four stormwater sampling events should be representative of “first flush” conditions (i.e., within the first 30 minutes of stormwater discharge) and the other two events should be collected within the first three hours of stormwater discharge. The JSCS storm event criteria also requires an antecedent dry period ($<0.1''$) of at least 24 hours.

The hydrographs provided in Appendix C indicate that only the sample collected on May 8, 2014 was a “first flush” sample (also indicated in text of Section 5.1.1). The data also indicates that less than four storm events were sampled each year. The stormwater sampling guidance and storm event criteria in the JSCS were established to collect data that are representative of typical stormwater discharge. Since these criteria were not met, the stormwater results may not be representative, and additional stormwater sampling may be required. Justification should be provided as to why JSCS guidance was not followed.

- b. Clarify on summary Table 1 what types of samples were collected on each date (i.e., first flush grab samples, periodic grab samples, and/or composite samples).

- c. In the third paragraph, “Stormwater at the Site commingles with surrounding sites in the Burgard Industrial Park before discharging to Outfall 18 at the east end of IT Slip as shown in Figure 2.” Should say “...as shown in Figure 3.”

5. Section 5.2 Data Summary:

- a. In Table 2, it is hard to distinguish between the colored shading for “Portland Harbor PRG – Protected Water Uses” and “Portland Harbor PRG – Direct Contact/Ingestion” when the table is printed. Using a different color (such as yellow) for one of the columns would assist in reading this table.
- b. In Tables 2 and 3, analytical flags (e.g. “J”, “O”, “A1”, “K”, etc.) should be defined in the footnotes.
- c. In Table 3, PRGs for all constituents should be provided including PCBs, and PAHs. The column “Portland Harbor PRG – Direct Contact/Ingestion” is listed in the footnotes incorrectly as RAO 3. This PRG corresponds with RAO 5 and the footnote should be corrected. In addition, the footnote for “Portland Harbor PRG – Migration of Contaminants” should state that this PRG corresponds with RAO 9.

6. Section 5.3.2 Stormwater SLV and PRG Exceedances: Only stormwater samples collected after October 2014 are discussed in this section, meaning that only samples from October 15, 2014 and February 5, 2015 were considered (two samples). The number of stormwater samples evaluated is insufficient for making conclusions regarding SCM effectiveness and additional stormwater sampling should be conducted per JSCS guidance.

7. Section 5.3.2.1 Inorganic Constituents: Last paragraph states, “Based on these results [from February 2015], the Site is not contributing to releases of metals at unacceptable levels to the Willamette River.” Aluminum, Cadmium, Lead, Manganese, Nickel, and Zinc all had concentrations above the SLVs.

8. Appendix A Stormwater Sampling Work Plan:

- a. The JSCS guidance (Section D.5.2) states at least four separate storm events per year be sampled. Two of the four stormwater sampling events should be representative of “first flush” conditions (i.e., within the first 30 minutes of stormwater discharge) and the other two events should be collected within the first three hours of stormwater discharge. The work plan should state that the JSCS guidance will be followed or relevant parts cited.
- b. The Work Plan should include descriptions of the filtration inserts to be implemented in each catch basin.
- c. The catch basins chosen for sampling should represent all varying characteristics and conditions at the site. Provide a justification to explain why these four catch basins were considered representative of site discharges.
- d. Drainage from the southern end of the property is not represented by the four proposed sampling areas. Consider including CB-22 as a sampling area as this catch basin appears to represent drainage from the southern end. Conversely, CB-S2 does not appear to be

representative of any drainage from the site and is unlikely to be representative of site discharges. Consider excluding CB-S2.

- e. CB-6 appears to be the catch basin most representative of overall site discharges to the Willamette River. Therefore, instead of averaging the results of the other catch basins (CB-11, CB-3, CB-S2, CB-22) with CB-6, sampling results from the other catch basins (not necessarily the ones already chosen) should separately be used in identifying contaminant sources. Because there appears to be runoff from other facilities, it is Lampros' decision on whether to characterize and/or control runoff to determine impacts from offsite sources.
- f. Results should be presented in a revised Stormwater Source Control Evaluation (SCE) document according to JSCS guidance.